Type K10B
Thermal Cutoff
(Temperature rated Fuse)
10Amp Axial Leaded

www.optifuse.com (619) 593-5050

Ratings:

Ampere Rating: 10A Axial Leaded

Voltage Rating: 250V AC

Agency Standards and Listings:

Part Number	(A) Rated Funct. Temp. $T_F \cdot T_f$ (°C)	(B) Cut-Off Temp. (°C)	(C) Holding Temp. $T_H \cdot T_h \cdot T_C$ (°C)	(D) Max. Temp Limit $T_M \cdot T_m$ (°C)	Electrical Ratings								
					Current (A)	Voltage (V)							
K10B-077	77	74±2	48	200	10A	250V	•	•	•	•	•	•
K10B-087	87	81±2	52	200	10A	250V	•	•	•	•	•	•
K10B-094	94	91±2	62	160	10A	250V	•	•	•	•	•	•
K10B-099	99	96±2	68	200	10A	250V	•	•	•	•	•	•
K10B-103	103	97±2.5	68	200	10A	250V	•	•	•	•	•	•
K10B-113	113	108±2	81	200	10A	250V	•	•	•	•	•	•
K10B-116	116	111±2.5	83	200	10A	250V	•	•	•	•	•	•
K10B-121	121	118.5±2.5	86	200	10A	250V	•	•	•	•	•	•
K10B-128	128	126±2	100	250	10A	250V	•	•	•	•	•	•
K10B-139	139	135±2	109	200	10A	250V	•	•	•	•	•	•
K10B-142	142	135±2	110	200	10A	250V	•	•	•	•	•	•
K10B-147	147	142±2	117	250	10A	250V	•	•	•	•	•	•
K10B-152	152	150±2	122	250	10A	250V	•	•	•	•	•	•
K10B-169	169	164±2	139	300	10A	250V	•	•	•	•	•	•
K10B-184	184	181.5±2	154	300	10A	250V	•	•	•	•	•	•
K10B-216	216	213±2	186	300	10A	250V	•	•	•	•	•	•
K10B-240	240	236±2	200	300	10A	250V	•	•	•	•	•	•

Term Explanation:

(A) - Rated Functioning Temp = ($T_F \cdot T_f$.) -The temperature at which a thermal cutoff changes its state of conductivity to open a circuit with detection current of 10mA or less as the only load. The temperature tolerance is +0, -10°C.

(B) - Cut-off Temp. = Is the actual operating temp. range when the thermal cut-off is made to operate inside a constant temp. oven whose temp. is raised at the rate of 0.5 to 1°C/min, while a detection current of 10mA or lower is applied.

(C) - Holding Temp = ($T_H \cdot T_h \cdot T_C$) -The maximum temp. at which a thermal cut-off can be maintained while conducting rated current for 168 hours without functioning.

(D) - Maximum Temp. Limit = ($T_M \cdot T_m$)-The maximum temp at which mechanical and electrical properties of a thermal cut-off can be maintained for 10 minutes without resuming conductivity after functioning.

Rated Current = (Ir) -Rated current is the maximum current that thermal cut-offs allow to carry and are able to cut-off the circuit in safety.

Rated Voltage = (Ur) -Rated voltage is the maximum voltage that is allowed to apply to the circuit in which the thermal cut-off is used.

Electrical Characteristics:

Insulation Resistance = The insulation resistance is to be measured with a DC voltage of twice the rated voltage, and at least 0.2M Ω. across the disconnection.

Dielectric Voltage - Withstand Test = A thermal cut-off shall withstand double the rated voltage for 1 minute without breakdown.

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Mechanical Strength:

Pull = The thermal cut-off is to be supported in any convenient manner so as not to damage it and a pull force as 4.0P(17.8N) to each lead for 10 minutes.

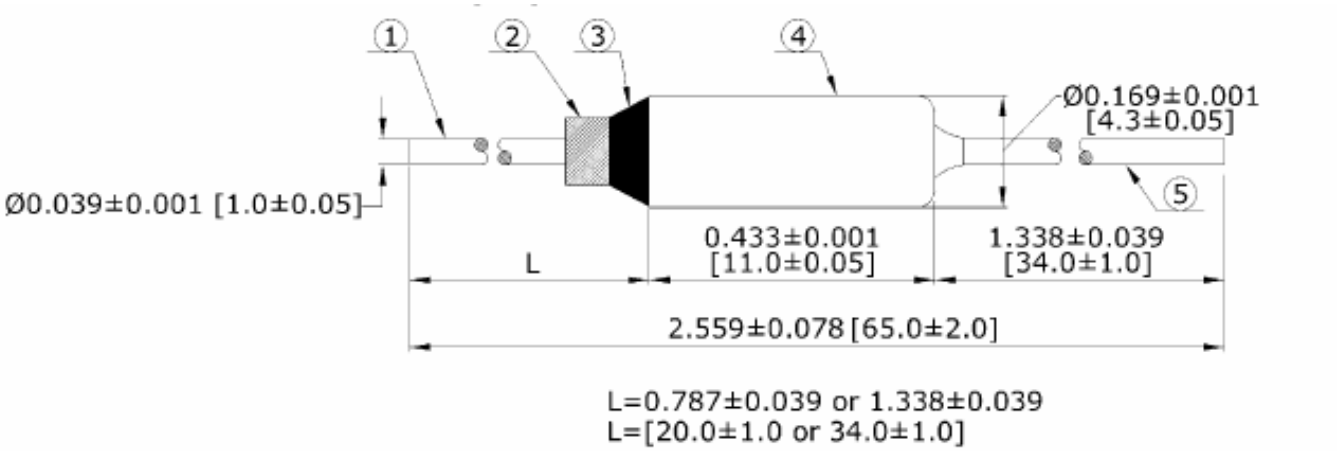
Push = The thermal cut-off is to be supported in any convenient manner so as not to damage it and a push force as 1.0P(4.4N) to each lead for 10 minutes.

Twist = The thermal cut-off is to be rigidly supported so as not to damage it. Each lead is to be bent through 90 degrees at a location 10mm from the body of thermal cut-off and then twisted through 180 degrees.

Packing:

(Bulk 100 fuses / poly bag) (10 poly bags / box, altogether 1000 fuses)

Mechanical Dimensions: Inches [mm]



NO.	Component	Material	Plating	Quantity
1	Lead	Copper	Silver (Ag)	1
2	Isolation Tube	Black Ceramic		1
3	Sealing Resin	Epoxy Resin		
4	Casing	Brass	Silver (Ag)	1
5	Lead	Copper	Tin (Sn)	1

Physical Characteristics:

Soldering Parameters

Temp	Distance	10mm	15mm	20mm	Soldering Conditions
94° C		1sec	2sec	3sec	Welding iron (bathroom) Temperature: 300°C Tin solder: 60%Sn
94°C~100°C		2sec	3sec	4sec	
101°C~130°C		3sec	4sed	5sec	
130°C		4sec	5sec	5sec	

Warning:	-Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame. -Device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated. -Avoid contact of device with chemical solvent. Prolonged contact will damage the device performance.